

IN THE CLAIMS:

In accordance with 37 CFR §1.121, please substitute for original claim 8 the following rewritten version of the same claim, as amended. The changes are shown explicitly in the attached "Version with Markings to Show Changes Made."

8. (Amended) A modified 5T4 antigen according to claim 7, selected from the group consisting of HMADMVTWL (SEQ ID NO:17) and NLLEVPADL (SEQ ID NO:19).

REMARKS

Entry of the foregoing substitute sequence listing and amendments to the specification and claims prior to examination are respectfully requested.

If there are any fees in connection with the filing of this Amendment, please charge such fees to our Deposit Account No. 19-0741. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

June 27, 2001
Date

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VERSION WITH MARKINGS TO SHOW CHANGES MADE***Specification amendments*****Paragraph on page 54, line 10:**

It is possible to modify human 5T4 to enhance its immunogenicity and thus induce more efficacious immunotherapy responses. ~~In order to~~ To do this, identification of HLA CTL epitopes and modification of such epitopes to improve binding to the HLA molecule, and ~~this thus~~ more efficient CTL induction, is performed using the programme "Peptide Binding Predictions" devised by K. Parker at the National Institutes of Health; (~~<~~http://www.bimas.dcrn.nih.gov/cgi-bin/molbio/ken_parker_comboform~~>~~) (see Parker, K. C. ~~et al., 1994. J. Immunol.~~ *J. Immunol.*, 152:163 (1994)). The following results are obtained for human (Table 4) and murine (Table 5) 5T4 9mers:

Table 4: Human 5T4 9mers binding to HLA A 0201

Rank	Start	Sequence	Dissociation Time
1	97	FLTGNQLAV (SEQ ID NO:5)	319.939
2	364	ALIGAIFLL (SEQ ID NO:6)	284.974
3	351	SLQTSYVFL (SEQ ID NO:7)	176.240
4	368	AIFLLVLYL (SEQ ID NO:8)	137.482
5	283	GLPHIRVFL (SEQ ID NO:9)	117.493
6	358	FLGIVLALI (SEQ ID NO:10)	110.379
7	81	NLTEVPTDL (SEQ ID NO:11)	87.586
8	95	NLFLTGNQL (SEQ ID NO:12)	79.041
9	222	FLYLPRDVL (SEQ ID NO:13)	63.174
10	373	VLYLNRRKGI (SEQ ID NO:14)	56.754
11	365	LIGAIFLLV (SEQ ID NO:15)	30.890
12	290	FLDNNPWVC (SEQ ID NO:16)	28.109
13	301	HMADMVTWL (SEQ ID NO:17)	27.207

Table 5: Murine 5T4 9mers binding to human HLA A 0201

Rank	Start	Sequence	Dissociation Time
1	307	YMADMVAWL (<u>SEQ ID NO:18</u>)	3680.892
2	81	NLLEVPADL (<u>SEQ ID NO:19</u>)	324.068
3	97	FLTGNQMTV (<u>SEQ ID NO:20</u>)	319.939
4	370	ALIGAIFLL (<u>SEQ ID NO:21</u>)	284.974
5	228	FLFLPRDLL (<u>SEQ ID NO:22</u>)	178.158
6	357	SLQTSYVFL (<u>SEQ ID NO:23</u>)	176.240
7	374	AIFLLVLYL (<u>SEQ ID NO:24</u>)	137.482
8	289	GLAHVKVFL (<u>SEQ ID NO:25</u>)	117.493
9	364	FLGIVLALI (<u>SEQ ID NO:26</u>)	110.379
10	379	VLYLNRKG (<u>SEQ ID NO:27</u>)	56.754

Sentence on page 55, line 11:

The above data derived from the Parker Peptide Binding Predictions Programme indicates that mutation of the human AA sequence starting at position 301 from YMADMVAWL (SEQ ID NO:18) when changed to HMADMVTWL (SEQ ID NO:17) leads to a 10 fold increase in half time of dissociation to HLA A0201.

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claim amendments

8. (Amended) A modified 5T4 antigen according to claim 7, selected from the group consisting of HMADMVTWL (SEQ ID NO:17) and NLLEVPADL (SEQ ID NO:19).

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IN THE SPECIFICATION:

Page 54, line 20, before "binding" insert --(SEQ ID NOS 5-17, respectively in order of appearance)--.

Page 55, line 8, before "binding" insert --(SEQ ID NOS 18-27, respectively in order of appearance)--;

****Please note the line numbers on this page appear to be off so we counted down and put in our own line numbers.**

line 24, before "when" insert --(SEQ ID NO: 18)--; before "leads" insert --(SEQ ID NO: 17)--.

Page 56, line 6, before "to" insert --(SEQ ID NO: 11)--;

line 7, before "lead" insert --(SEQ ID NO: 19)--.

IN THE CLAIMS:

Claim 8, line 2, after "of" insert --(SEQ ID NO: 17)--; after "and" insert --(SEQ ID NO: 19)--.

